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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,374	04/22/2004	Toshiaki Fukui	010482.54890US	7091

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EXAMINER

CHOW, LIXI

ART UNIT PAPER NUMBER

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	04/03/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/829,374	FUKUI, TOSHIAKI	
	Examiner	Art Unit	
	Lixi Chow	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 2, 4 and 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 2, 4, and 7 are objected to because of the following informalities:
in lines 6 and 8 of claim 2, the word “distance” should be --difference-- ;
in line 12 of claim 4, the word “pickup” should be --disc--; and
in line 16 of claim 7, the word “pickup” should be --disc--.

Appropriate correction is required.

Drawings

2. Figure 2A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

3. Claims 1-9 are allowed.

Although the closest reference of record, for example, Yoo (US Pub. No. 2004/0151096), discloses an optical disc apparatus that calculates a brake voltage application time for the motor spindle; however, Yoo fails to disclose calculating the brake voltage application time with reference to a variation of the widest pattern signal, or judging the size of the optical disc mounted with reference to inverse numbers of a first widest pattern signal and the second widest

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pattern signal. Therefore, none of the reference of record alone or in combination disclose or suggest an optical disc apparatus comprising a motor for rotating a turn table on which an optical disc is mounted, an optical pickup for irradiating a light beam to the optical disc and receiving reflected light from the optical disc for reading and/or writing data with respect to the optical disc, and a motor controller for controlling the rotation of the motor, wherein the motor controller executes the following processes:

obtaining a first widest pattern signal corresponding to a pulse width of a signal having the widest pattern among RF signals outputted from the optical pickup, when rotation speed of the optical disc reaches to a predetermined speed by driving the motor;

memorizing the first widest pattern signal in a memory;

supplying a braking voltage to the motor in a predetermined period;

further obtaining a second widest pattern signal corresponding to a pulse width of a signal having the widest pattern among RF signals outputted from the optical pickup after supplying the braking voltage to the motor; and

judging the size of the optical disc mounted on the turn table with reference to inverse numbers of the first widest pattern signal and the second widest pattern signal.

Furthermore, none of the reference of record alone or in combination disclose or suggest an optical disc apparatus comprising a motor for rotating a turn table on which an optical disc is mounted, an optical pickup for irradiating a light beam to the optical disc and receiving reflected light from the optical disc for reading and/or writing data with respect to the optical disc, and a motor controller for controlling the rotation of the motor, wherein the motor controller executes the following processes:

starting to supply a braking voltage to the motor when the optical disc mounted on the turn table is rotated by the driving force of the motor and focusing servo control of the optical pickup is functional;

observing a variation of a widest pattern signal corresponding to a pulse width of a signal having the widest pattern among RF signals outputted from the optical pickup;

stopping suppliance of the braking voltage to the motor when an inverse number of the widest pattern signal becomes equal to or smaller than a predetermined threshold value; and

judging that the rotation of the optical disc has stopped, after waiting a predetermined period sufficient to stop the rotation of the optical disc through inertia.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoo (US Pub. No. 2004/0151096) is cited, because Yoo teaches calculating a brake voltage application time for the motor spindle.

Senso (US 4,653,040) is cited, because Senso discloses an apparatus utilizing a disc size detecting circuit to determine the size of an optical disc mounted on the apparatus.

5. This application is in condition for allowance except for the following formal matters:

See Claims Objections above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

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A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lixi Chow whose telephone number is 571-272-7571. The examiner can normally be reached on Mon-Fri, 8:30am to 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LC 3/30/07



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER